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ABSTRACT

A history professor describes his involvement with project HELDS (Higher Education for Learning Disabled Students) and discusses ways in which he accommodates LD students in his classes. Among the general techniques advocated are taping, use of analogies to help the students understand concepts, and emphasis on context of events within time periods. He cites the value of having readers, dictators, and tutors available. A list of mnemonic aids and the course syllabus are among appended information. (CL)

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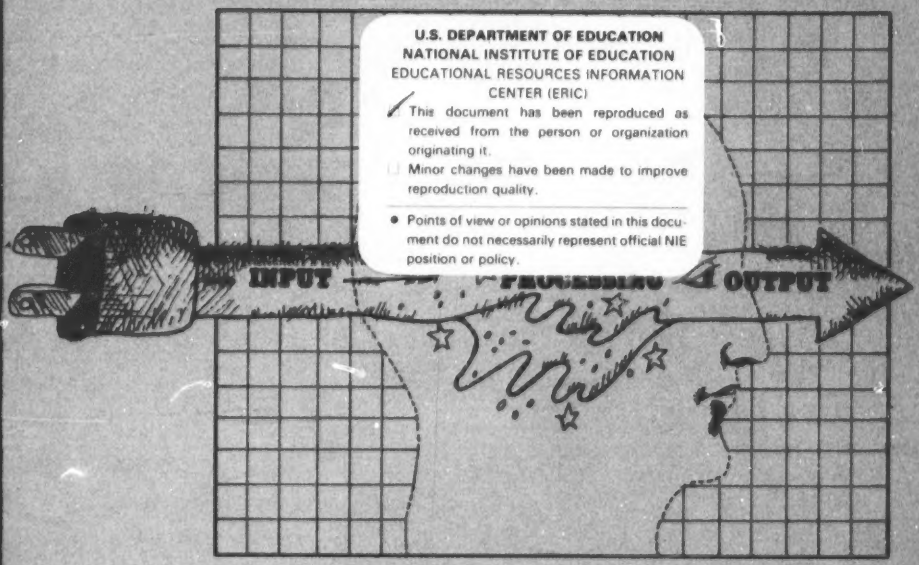
CLEO AND THE LEARNING DISABLED

by
Zoltan Kramar



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THE HELDS PROJECT SERIES
CENTRAL WASHINGTON UNIVERSITY

2

CLEO AND THE LEARNING DISABLED

Alternative Techniques for Teaching History to Learning Disabled Students in the University

by
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Professor of History
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HELDS Project
(Higher Education for
Learning Disabled Students)

Instructional Media Center
Central Washington University
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THE HELDS PROJECT AT CENTRAL WASHINGTON UNIVERSITY

The acronym HELDS stands for Higher Education for Learning Disabled Students. It represents a model program funded for three years (1980-1983) by the Fund for the Improvement of Post Secondary Education (FIPSE), a division of the Department of Education. This project was funded as a model for other colleges and universities that are preparing to provide equal academic access for the learning disabled students.

Project HELDS had three major focuses. The first was to provide such access for the learning disabled student under Section 504 of the Rehabilitation Act of 1973. This we did for learning disabled students, most of whom were admitted without modified requirements to Central Washington University. These students were not provided remedial classes. They were enrolled in classes with other college students. The help that we gave was habilitative, rather than remedial, teaching them how to compensate for their weaknesses.

The habilitative training began with identification of those who were learning disabled and included, but was not limited to, such support services as taped textbooks (provided through the services of our Handicapped Student Services Coordinator), readers, writers for tests, extended time for tests, pre-registration with advising to ensure a balanced schedule, the teaching of study skills and tutoring by tutors from the campus-wide tutoring program who were especially trained to tutor learning disabled students.

The second focus of the project was to give a core of twenty faculty teaching classes in the basic and breadth areas a sensitivity to the characteristics of students who were learning disabled so that they could modify their teaching techniques to include the use of more than one modality. This ensured an academic environment conducive to learning for the LD. The faculty members participated in monthly sessions which featured experts in the field of learning disabilities, and in the area of the law (Section 504) that deals with the handicapped student and higher education. There were several sessions in which Central Washington University graduates and currently enrolled LD students shared their viewpoints and experiences with the faculty members. As a result of this some faculty members used the students as resource people in developing curricula for their various disciplines published in this series.

The third focus of the project was to make the university community aware of the characteristics of learning disabilities and of the program at Central. It also sought to encourage other colleges and universities to initiate such programs.

WHAT IS A LEARNING DISABLED STUDENT?

People with learning disabilities have handicaps that are invisible. Their disability is made up of multiple symptoms that have been with them since childhood. Many of them have been described as "dyslexics," but if they are categorized as dyslexic, this will be only one of their many symptoms, as a sore throat is only one of the many symptoms of a cold.

Three concise descriptions of the learning disabled children are provided in Hallahan and Kauffman:

"The National Advisory Committee on Handicapped Children (1968) proposed the following definition, which was adopted by the 91st Congress:

> Children with special disabilities exhibit a disorder in one or more of the basic psychological processes involved in understanding or in using spoken or written thinking, talking, reading, writing, spelling, or arithmetic. They include conditions which have been referred to as perceptual handicaps, brain injury, minimal brain dysfunction, dyslexia, developmental aphasia, etc. They do not include learning problems which are due primarily to visual, hearing, or motor handicaps, to mental retardation, emotional disturbance, or to environmental disadvantage.

Task Force II of a national project (Minimal Brain Dysfunction in Children: Educational, Medical and Health Related Services, Phase Two of a Three-Phase Project, 1969) wrote the following two definitions:

> Children with learning disabilities are those (1) who have educationally significant discrepancies among their sensory-motor, perceptual, cognitive, academic, or related developmental levels which interfere with the performance of educational tasks; (2) who may or may not show demonstrable deviation in central nervous system functioning; and (3) whose disabilities are not secondary to general mental retardation, sensory deprivation or serious emotional disturbance.
>
> Children with learning disabilities are those (1) who manifest an educationally significant discrepancy between estimated academic potential and actual level of academic potential and actual level of academic functioning as related to dysfunctioning in the learning process; (2) who may or may not show

demonstrable deviation in central nervous system functioning; and (3) whose disabilities are not secondary to general mental retardation, cultural, sensory and/or educational deprivation or environmentally produced serious emotional disturbance.[1]

Although the preceding definitions are concerned with children, the President's Committee on Employment of the Handicapped, in their booklet *Learning Disability: Not just a Problem Children Outgrow*, discusses LD adults who have the same symptoms they had as children. The Department of Education (Reference Hallahan & Kauffman) says that two to three percent of the total public school population are identified as learning disabled and that there are over fifteen million unidentified LD adults in the United States, acknowledging, of course, that people with this problem are not restricted to the United States but are found all over the world.

We know that many learning disabled persons have average or above average intelligence and we know that many of these are gifted. In their company are such famous gifted people as Nelson Rockefeller, Albert Einstein, Leonardo da Vinci, Thomas Edison, Hans Christian Anderson, Auguste Rodin, William Butler Yeats, and Gustave Flaubert.

The causes of learning disabilities are not known, but in our project each of our identified learning disabled students shows either an unusual pregnancy (trauma at birth, such as delayed delivery, prolonged or difficult delivery) or premature birth. They **oftentimes** have a genetic family history of similar learning disability problems.

An exerpt from my *Criterion and Behavioral Checklist for Adults With Specific Learning Disabilities* has been included as Appendix A.

/s/ MCS
6 June 1982
Ellensburg, Washington

[1]Daniel P. Hallahan and James M. Kauffman *Exceptional Children* (Englewood Cliffs, New Jersey: Prentice-Hall, 1978), pp. 121-122.

I. CLEO AND THE LEARNING DISABLED STUDENT

In his university career the learning disabled student (LD) is not likely to encounter difficulties that are exclusively specific to the study of history. Rather, he will most likely face problems that are generic to all those disciplines where the transmission of information occurs overwhelmingly by means of lectures and the printed word, and where evaluations are made mostly on the basis of written work. In other words, history, philosophy, and the lecture oriented social sciences together constitute a cluster of academic disciplines which place generally the same obstacles across his way to success.

As far as the instructor is concerned, his first problem is one of identification. In some cases this problem is, bluntly put, insoluble. Let us assume that an LD, who is unaware of his own hidden handicaps, finds himself in a large class where his progress is evaluated on the basis of machine graded tests. If he does poorly, how does the instructor single him out and separate him from the usual crowd of unmotivated, lazy losers? The answer is he doesn't, unless he has taken the unusual precaution of having asked his students for a sample of their handwriting.

At the other end of the spectrum, identification is no problem at all if the student knows of his condition, can document it for the benefit of a most likely skeptical instructor, or, if the university has the staff and the necessary facilities to diagnose and to confirm it.

Spread out between these two extremes are the rest of the cases. Here, for purposes of identification it is essential that the instructor be aware of the LD phenomenon. Since it is unlikely that the professor will be a skilled diagnostician, the first clue to a possible problem will be some type of aberrant writing and/or reasoning pattern. (See Appendix A for Behavioral Check-List.) If in private consultation the instuctor is able to gain the cooperation of the student, and, if the institution has the necessary staff and facilities for diagnosis, the problem is already half solved. Once the student's condition is diagnosed and confirmed, the instructor, with the advice of the diagnostician, may then proceed to develop that mix of alternative learning and evaluating approaches which will best suit the student's specific condition.

In conclusion let it be noted that it is not likely that a student with severe learning disabilities will ever be able to cope with the extremely rigorous graduate training which produces the academic historian. With the right approach, however, such a student can acquire that basic historical sense and perspective which has always been a hallmark of the university educated adult.

II. FIRST CONTACT

We know that LDs learn better the more and the more varied the sense modalities the instructor employs. Yet, for an instructor who is accustomed to transmit and to interpret information mostly by lecture, accommodating such students may at first appear to be a puzzling problem. Let me show you how I do it.

It has been suggested by some that after copies of the course syllabus have been distributed, the intructor would do well to read the syllabus aloud to his class. To be quite frank about it, personally I find this method a waste of time. In my general remarks to the new class, however, I do read aloud the specific paragraph pertaining to LDs. (See Appendix D.) If thereupon LDs are forthcoming, I'll give them the following additional instruction *in private*.

I'll point out to them that certain reference books, along with their text, are either available on tape, or can be taped upon request.

Next, I'll explain to them how to approach and use the text for optimum results by pointing out the very logical and rational plan on the basis of which books, and especially textbooks, are usually composed. (See Appendix B) We have a tendency to take the organizational infrastructure of a book for granted. To most LDs this is not only a revelation but also a potent aid toward increased reading comprehension.

Finally, I'll mention mnemonics to them. This technique of memorization of course will not be new to them, but its specific application to the study of history might be novel. (See Appendix C, especially items 18 and 20.)

III. GENERAL TEACHING STRATEGIES

I must admit that I have been rather fortunate in that, long before I was introduced to the LD problem, my class room "management" as well as my lecture styles both somehow evolved along lines which, at least in part and as far as they go, seem to be helpful to the learning disabled.

For instance, taping I have always permitted. Important concepts, relationships, processes, etc., I have always restated in a number of different ways. I have also been known to have indulged in a rather limited and restrained form of role-playing. As an example, when I discuss the circumstances surrounding the death of Socrates I do a modestly dramatic reading of the pertinent passages in the *Apology* and the *Crito*. During the course of an average lecture I cover acres of chalkboard with doodles, some of which at least seem to be apropos to what I am saying. While I am generally loath to "clutter up" my "stage performance" with AV presentations, I do encourage students to view or to listen to pertinent material on their own. I have also found that analogies can be rather

useful in certain instances. Like all of us, I too am well aware of the fact that explaining or reasoning by analogy can be hazardous business. In some cases, however, if carefully handled, analogies seem to be worth the risk. Let me briefly sketch a modest example.

In clear contrast to spectacular, violent revolutions, the devolution of an institution is a phenomenon many young persons may find difficult to visualize and hence to comprehend. The century long decline of the Roman Republic is a case in point.

For three generations, in staggeringly complex interaction, an array of powerful forces gnawed away at the innards of the republic until it—not so much crashed—as simply stopped functioning, ceased to generate power.

After having stated and re-stated this process in a number of traditional ways, I finally produced—with considerable trepidation at being hooted off my podium by the more sophisticated—my "automotive" analogy.

It goes something like this:

"Take a VW Bug. It is small, compact, sturdy and economical. There is nothing wrong with it. It will take you most anywhere as long as you are patient and in no particular hurry. But hitch a ten-ton trailer to it and expect it to roar up Donner Pass, and it will leave you badly in the lurch." (At this point I may ask the class to volunteer some symptoms of typical engine dysfunction under such conditions.) "There is still nothing basically wrong with my Bug. It merely cannot perform under conditions for which it has not been designed. You see, the case of the Roman Republic is somewhat similar. The republic, as a political institution, had been eminently well designed to govern a tiny city-state in the late 500's B.C. Some five centuries later, in the 100's B.C., with only marginal adjustments, it was still expected to govern what by that time amounted to a huge world empire. If it increasingly failed to do so, it was not because there was anything wrong with its basic structure. It was simply not designed to cope with the problems on the scale of a world empire. It was hopelessly overloaded. It merely spun its gears without generating the necessary motive power."

This analogy, presented with appropriate sketches and doodles on the chalkboard, while admittedly sophomoric and simplistic, may help learning disabled members of the class comprehend a complex and important process in our civilization.

Incidentally, please note the rather inelegantly pedantic reference to dates. I do this consciously, with my LDs in mind, who may have trouble with time sequences. Generally speaking, the instructor should take more than average care in placing the events under discussion in their proper time and space.

For instance, when one characterizes different European states at a particular period in history, it helps greatly if one goes about it in a rather

literal and pedestrian way. For instance:

"In the early Renaissance, that is, about 1450 A.D., England appeared to be.... At the very same time, east of England, on the continent of Europe, Germany continued to be a geographical expression... Still in 1450, the same could be validly said of Italy, that part of southern Europe which looks roughly like a boot about to kick a triangular soccer ball, that is the Island of Sicily...etc., etc."

Finally, I must re-emphasize that LDs tend to live in a very literal world, especially in regard to the phenomena of cause and effect. Now I realize that the purist will balk at this point. Having done so myself, I have finally come to terms with a less than Platonic universe. True, cause and effect relationships may not exist in the realm of physics. But then, I rationalized, I am, after all, holding forth on human affairs, where both "common sense" and "cause and effect" apply, simply because there are enough of us who assume that they do and hence perform our activities as if they did.

IV. SPECIFIC PROBLEMS, POSSIBLE SOLUTIONS

At this point it may be useful to get down to some specific types of cases. In the meantime, the instructor should be aware of the fact that his learning disabled students have nothing wrong with their intellects. It is the linkages, the connections between their data channeling senses and their brain that have a tendency to "short out." Therefore they have to be given the opportunity to pick up and channel data in a modality specifically suited for them.

One fairly common type of LD problem is decyphering written symbols. Students with such writing problems should have their text as well as all pertinent reference material recorded or read to them. Even if they can read with comprehension, it will be at an "uneconomically" slow pace, and so it is helpful to teach them how to acquire information by shortcuts, such as chapter summaries, tables of contents, glossaries, indexes, pictures with captions, etc.

Students with dysgraphia have difficulty writing. They may or may not be able to type. In such cases oral examinations and reports are called for. Another possibility might be for someone to take down their dictation. This, incidentally, has been a rather common practice with blind students who can't touchtype.

Aural receptive dysphasia is yet another cause of learning disability. For students suffering from this syndrome, the instructor's lectures come across as so much "background noise." In such cases the alternative modalities will have to be largely of the visual kind.

Finally, there are students who have problems with sequential memory tasks involving numbers, letters or multi-stepped instructions. Dividing these tasks into smaller, or even into their smallest constituent elements will usually be helpful. Additional tutoring in basic skills may also be necessary. Stressing mnemonics and the careful sequencing of events are essential.

By way of conclusion let me once more emphasize: learning disabled students who make it to an institution of higher learning are at least average, and many are above average, in intelligence.

They are the ones among their peers who are driven to succeed. In many ways they have already learned to compensate for their handicaps. As L.M. Smith has put it, their "...capacity for learning is intact. It is only the means by which information is processed that is different."

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APPENDIX A

Criterion and Behavioral Checklist for Adults with Specific Learning Disabilities

1. Short attention span.

2. Restlessness.

3. Distractability. (The student seems especially sensitive to sounds or visual stimuli and has difficulty ignoring them while studying.)

4. Poor motor coordination. (This may be seen as clumsiness.)

5. Impulsivity. (Responding without thinking.)

6. Perseveration. (The student tends to do or say things over and over. Mechanism that says "finished" does not work well.)

7. Handwriting is poor. (Letters will not be well formed, spacing between words and letters will be inconsistent, writing will have an extreme up or down slant on unlined page.)

8. Spelling is consistently inconsistent.

9. Inaccurate copying. (The student has difficulty copying things from the chalkboard and from textbooks; for instance, math problems may be off by one or two numbers that have been copied incorrectly or out of sequence.)

10. Can express self well orally but fails badly when doing so in writing. In a few cases the reverse is true.

11. Frequently misunderstands what someone is saying. (For instance, a student may say, "What?", and then may or may not answer appropriately before someone has a chance to repeat what was said previously.)

12. Marked discrepancy between what student is able to understand when listening or reading.

13. Has trouble with variant word meanings and figurative language.

14. Has problems structuring (organizing) time -- The person is frequently late to class and appointments; seems to have no "sense of how long a "few minutes" is opposed to an hour; has trouble pacing self during tests.

15. Has problems structuring (organizing) space -- The student may have difficulty concentrating on work when in a large, open area -- even when it's quiet; may over or under-reach when trying to put something on a shelf (depth perception).

16. Has difficulty spacing an assignment on a page, e.g., math problems are crowded together.

17. Thoughts -- ideas wander and/or are incomplete in spoken and written language. Student may also have difficulty sequencing ideas.

18. Sounds -- A student's hearing acuity may be excellent, but when his brain processes the sounds used in words, the sequence of sounds may be out of order: e.g., the student hears "aminal" instead of "animal" and may say and/or write the "aminal."

19. Visual selectivity -- May have 20/20 vision but when brain processes visual information, e.g., pictures, graphs, words, numbers, student may be unable to focus visual attention selectively; in other words, everything from a flyspeck to a key word in a title has equal claim on attention.

20. Word retrieval problems -- the student has difficulty recalling words that have been learned.

21. Misunderstands non-verbal information, such as facial expressions or gestures.

22. Very slow worker -- but may be extremely accurate.

23. Very fast worker -- but makes many errors and tends to leave out items.

24. Visual images -- Has 20/20 vision but may see things out of sequence, e.g., "frist" for "first," "961" for "691." Or, a student may see words or letters as if they are turned around or upside down: e.g., "cug" for "cup," or "dub" for "bud," or "9" for "L" for "7," etc.

25. Makes literal interpretations. You will have to have them give you feedback on verbal directions, etc.

26. Judges books by their thickness because of frustration when learning to read.

27. Has mixed dominance: e.g., student may be right handed and left eyed.

28. Moodiness -- Quick tempered, frustration.

29. Cannot look people in the eyes and feels uncomfortable when talking to others.

30. Has trouble answering yes or no to questions.

Students with specific learning disabilities which affect their performance in math generally fall into two groups:

1. Those students whose language processing (input and output) and/or reading abilities are impaired. These students will have great difficulty doing word problems; however, if the problems are read to them, they will be able to do them.

2. Those students whose abilities necessary to do quantitative thinking are impaired. These students often have one or more problems such as the following:

A. Difficulty in visual-spatial organization and in integrating nonverbal material. For example, a student with this kind of problem will have trouble estimating distances, distinguishing differences in amounts, sizes, shapes, and lengths. Student may also have trouble looking at groups of objects and telling what contains the greater amount. This student frequently has trouble organizing and sequencing material meaningfully on a page.

B. Difficulty in integrating kinesthetic processes. For example, a student will be inaccurate in copying problems from a textbook or chalkboard onto a piece of paper. The numbers may be out of sequence or the wrong numbers (e.g., copying "6" for "5"). Problems may be out of alignment on the paper. Graph paper is a must for them.

C. Difficulty in visually processing information. Numbers will be misperceived: "6" and "9," "3" and "8" and "9" are often confused. The student may also have trouble revisualizing. i.e., calling up the visual memory of what a number looks like or how a problem should be laid out on a page.

D. Poor sense of time and direction. Usually, students in the second group have the auditory and/or kinesethic as their strongest learning channels. They need to use manipulative materials accompanied by oral explanations from the instructor. They often need to have many experiences with concrete materials before they can move on successfully to the abstract and symbolic level of numbers.

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APPENDIX B

ORGANIZATION FOR READING — SECONDARY

I. Thought Relationships
   - A. Initial Comprehension
     1. Grasping particular kind of relationship present.
   - B. Efficient Recall
     1. Perceiving some kind of order or system in the ideas to be recalled
   - C. Critical Analysis
     1. Abilitiy to weigh significance of details.
        a. Relevancy of details to main point.

II. Organizational Patterns in Writing
   - A. Paragraph structure (Social Studies, Science, Language Textbooks for secondary schools in order of frequency)
     1. Enumerative order
     2. Time order
     3. Cause—effect
     4. Comparison—contrast
   - B. Paragraph structure (Other Literature, fiction, nonfiction, order of difficulty)
     1. Time sequence
     2. Position
     3. Degree
     4. Classification
     5. Comparison
     6. Cause and effect
     7. Analogy

PERCEIVING ORGANIZATION OF FACTUAL MATERIAL — SECONDARY

(Possible sequence in steps for lessons.)

Step 1. *Patterns in all phases of life*

order exists everywhere
clock face, design on flag, planets
avoiding collisions—measles instead of Rheumatism
ideas can be in patterns—time—simple listings

Using other examples, repeat, reteach, review until mastered.

Step 2. *Symbols representing basic patterns*

chart for easy classroom reference
time order!
simple listing!
cause—effect!
comparison—contrast!

Show how patterns apply to verbal symbols. (Lists of words or phrases) can be arranged in more than one pattern, i.e., rearrange with students a list of well known people to show time order, simple listing or comparison—contrast.

Abraham Lincoln
George Washington
Nero
Douglas MacArthur
Ralph Bunche
Christopher Columbus
Adolph Hitler
Charles Lindberg
Martin Luther King, Jr.
John Glenn
Al Capone

Using other lists, reteach, review until mastered.

Step 3. *Make Something*

Make something from groups of sentences. The teacher might say: "Here are some groups of sentences; as they stand, they have no particular pattern. Decide how they could be rearranged so that they are put together in some orderly fashion, not just thrown together. After you have done this, see if you can tell what patterns you have made."

"Allan had developed good study habits. School counselors found him dependable. He was at ease in his college interview. He was accepted at the college of his first choice. Exams did not make him nervous. He had two school letters to his credit."[1]

If students can sort the effect out from the list of causes

[1] Olive S. Niles, "Organization Perceived," *Developing Study Skills in Secondary Schools*. Newark, Del. IRA (1965), pp. 57-76.

(putting it either first or last in their rearrangement), they have demonstrated that they see the cause-effect relationship of these ideas.

Using other examples, review, reteach until skills in all kinds of beforementioned patterns are mastered.

Step 4. *Identify structure of single paragraphs* using the pattern to help them understand the author's point. (Remember that mere classification is not the goal.) The teacher, by guidance through leading questions and positively reinforcing correct answers, should make sure at every step to show the students that recognition of pattern helps them to understand and remember. Teacher might say, "First skim quickly through the paragraph to see what kind of pattern it has. Then read with the pattern in mind. Finally, answer the questions without looking back."

"During the 1830's, with Andrew Jackson in the White House, Oklahoma was made a reservation for Indians. Within fifty years, however, most of the West was settled and white men, hungry for land, wanted to move to Oklahoma. The federal government bought most of this rich territory back from the Indians and announced that settlers could enter April 22, 1889. They gathered in crowds on the border. At noon a bugle blew and people dashed to claim the best lands. On that first day fifty thousand settlers moved into the territory. In one year some towns already had schools, churches and business establishments." [1]

1. What pattern has the author used?
2. About how long did Oklahoma remain an Indian reservation?
3. What is the main fact about the early settlement of Oklahoma by white men that the author wants to impress upon the reader?

Step 5. *Signal words to detect the pattern*

Students glancing through a paragraph or selection containing the following words and phrases should have no difficulty in identifying the basic patterns:

1. To begin with .....
   Next .....
   Not long after .....
   Then .....
   Finally, ...

[1] Karlin, *Teaching Reading in High School* (Col. I), p. 170

2. One of the .....
   However, ...
   In spite of .....
   But .....
   On the other hand .....

Step 6. *Disorganization or complex interweaving or different pattern*

Examples:

1. The United Kingdom is second to the United States in production of automobiles, trucks and buses. (*comparison, contrast and simple listing)*
2. There were no horses or cattle in America before the coming of the white man; therefore, man power had to be used for many laborious and time-consuming tasks that later were performed with the help of domestic animals. (*cause-effect and time order)*

Careful analysis of the patterns in a series of sentences like this does as much, perhaps, to help students read accurately as anything the teacher could devise.

The study of mixed patterns within paragraphs is a logical next step. The following is a sample in which the basic cause-effect pattern is combined with listing (of the reasons for the high cost of production of the newspaper):

"Making a city newspaper is a costly operation. A large staff is required to collect local news, to say nothing of the effort and money which go into news reports from outside the immediate vicinity. Large newspapers support their own staffs at points around the world where news is breaking; they also subscribe to news services which give them more complete coverage. Intricate and expensive machinery and highly skilled technicians are involved in the actual printing of a great daily paper. They work at great speed when the news is hot. The price at which papers are sold to readers covers only a tiny fraction of this cost. The real revenue for the typical newspaper comes from the advertisers and is its Achilles heel. Obviously, the paper cannot often publish material which would be offensive to the men who support it. To some degree, at least, the advertisers control the policy of the paper. In this sense, we have, even in America, a press which is not completely free."

Time spent in analyzing the various thought relationships in such a paragraph is time well spent in the interests of accurate reading.

Step 7. *Pay-off from awareness of pattern*

The student must learn to react to the author's pattern by saying to himself. "the author is giving me a cause and several effects of that cause. First I must understand the cause OR time sequence OR comparison contrast."

Most students are familiar with some form of the SQ3R[1] method of study. Survey, Question, Read, Recite, Review.

It is not difficult to show students how they may as a part of the SQ3R step learn to identify the basic pattern of what they are about to read BEFORE they start to read. To do this we must give them experience in skimming for clues. Use their regular textbooks.

For example, here are some of the clues from one such section:[2]

- Several conditions favored industrialization....a number of factors combined....
- Another condition....a large labor force....
- Resources and an ample labor supply were organized by businessmen....
- Businessmen would not have made goods unless there was a demand....from several sources....

And so on. The first two words of the section (Several conditions...) alert the reader to a probable listing of these "conditions." And a small amount of skimming confirms this conclusion.

The good student says to himself: "All right. I have a simple list here. Since it's just a list, it doesn't matter whether I try to remember it in the order in which the author has given it to me, but I'd better review after I finish my study to see whether I can recall all the important items in the list. As I study, I'll make note of how many important parts there are in the list."

A second example is from another section of the same text[3] and represents a very frequent pattern in social studies material. As the student skims, he picks up these clues:

- When the new American nation came into being....

[1]F.P. Robinson (Pressey Robinson and Horrocks) *Psychology in Education*, pp. 571-2

[2]T. Walter Wallbank and Arnold Schrier, *Living World History* (Scott, Foresman and Company, 1964).

[3]Ibid., p. 513.

- .....in 1796 and 1803....
- By 1830....
- During the next few decades....
- ....in 1860.
- ....War that followed lasted from 1860 to 1865....

The student should conclude: "This information is in time order. I will recall the facts more easily if I note them in this order as I read and then review them in the same way."

Step 8. *Complex writing*

Some patterns in factual writing are complex enough so that they do not yield to the analysis possible in quick skimming. The student must be taught to unravel these combinations by a process of self-questioning as he/she proceeds through the material. As they read to a designated place, stop and help them phrase patterning-thinking questions that focus attention on organization and on the way in which organization can contribute to both initial understanding and recall.

Use your textbooks for examples. Review and reteach until mastered.

Remember to work in overlapping rather than contiguous territories.

APPENDIX C
MNEMONIC AIDS

1. *Calendar Days*
   Thirty days hath September
   April, June, and November
   All the rest have thirty-one
   Save February
   Which has twenty-eight in time
   Till leap year gives it twenty-nine
2. *Manual*
   A manu*al* for a teacher gives *al*most
   all the techniques of teaching reading!
3. *Their*
   The phrase "their dog" shows ownership.
   "Their" contains the word "heir."

4. *the*
   there all begin with "the"
   their

5. A *piece* of *pie.*
   piece

6. *Personnel*
   Personnel are people!

7. Personal
   One "n" indicates singularity.
   Therefore, something personal
   applies only to you!

8. ROY G BIV

Red Orange Yellow Green Blue Indigo Violet

9. "Pa" the Pacific Ocean
   Atlantic Pacific
   is on the west side
   of the U.S. as "P" is
   on the left of
   the word "Pa."

10. Ken Pratt Caught Old Feather Going South

Kingdom Phyla Class Order Family Genus Species

11. Than (comparison)
    Then (time)

12. *Daylight Saving Time*
    Spring ahead (move clock ahead in spring)
    Fall back! (move clock back in fall)

13. Use of bring, take
    Bring here. Example: Please bring the book to me.
    Take away. Example: Please take the box when you leave.

14. arithmetic — a rat in the house might eat the ice cream.

15. geography — George Edward's old grandfather rode a pig home yesterday.

16. princi*pal* — a *pal*
    princi*ple* — a ru*le*
    *vill*ain — lives in a *villa*
    gram*mar* — bad grammar can *mar* your speech
    re*commend* — *commend*
    station*ery* — pap*er* (we write letters with it)
    station*ary* — stand still

separated or sep*a*rate — part
capit*o*l — it has a dome
capit*a*l — means m*a*in
A good *secret*ary can keep a *secret*.
acc*o*mm*o*dation — has double "c" and double "m"
aisle — you walk in church
dessert — you would like two instead of one
desert — you would only want to be in a desert *once* alone
abund*ant* — has an *ant* on its tail
pri*or* — ends with *or*

17. Great Lakes
    H — Huron
    O — Ontario
    M — Michigan
    E — Erie
    S — Superior
18. Roman Numeral Equivalents
    50 = *L*ambs
    100 = *C*an
    500 = *D*ance
    1000 = *M*errily
19. A pint's a pound the world around!
20. Nero — *N*o *E*vil *R*olls *O*ver.

APPENDIX D

Sample Syllabus which takes the potential presence of the LD student into consideration.

History 101
World Civilization: Pre-history to 1450.
Text: Ralph Burns, *World Civilizations*, 6th ed., Norton.
Exams: There will be two hour tests and a final examination, all of them of the short essay type.
For certified LD students alternative evaluations may be arranged.
Taping of lectures is permitted!

Please Note! Students who know they have, or who suspect that they may have a learning disability, please contact your intructor. Upon verification of your condition (to be done on campus, confidentially and free of charge) alternate learning methods will be arranged for you.

I. *Introduction.*

a. Definitions: value: institution; society; culture, civilization.

b. The nature and purpose of history.

Recommended films:

Frozen World, Civilization Series no. 1 (Life-Time Films, 1970)
How the Historian Asks Questions (Holt-Rinehart and Winston, 1966)
How the Historian Classifies Information (")
How the Historian Decides What is Fact (")
How the Historian Proves a Hupothesis (")

II. *The Riverine Civilizations of the Near East.*

a. Mesopotamia
b. Egypt.

Recommended Films:

Iraq: Stairway to the Gods (Centron Films, 1973)
Turkey: Crossroads of the Ancient World (")
Egypt: Gift of the Nile (Centron Films, 1977)

III. *Ancient Greece.*

a. The rise of Greek civilization.
b. Unity and Strife in the Greek world.
c. The Geek genius.
d. The Hellenistic world.

Recommended Films:

Greeks (International Film Bureau, 1974)
The Glory that was Greece (Time-Life)
Life in Ancient Greece: Home and Education (Coronet Instructional Films, 1959)
Life in Ancient Greece: Role of the Citizen (")

IV. *Ancient Rome.*

a. The rise and fall of the Roman Republic.
b. The Roman Empire.
c. Roman contributions.

Recommended Films:

Marc Antony of Rome (Teaching Film Custodians, 1948)
The Fall of the Roman Empire (Films, Inc.)

V. *Early Asian Civilizations.*

a. India.
b. The Mauryan empire.
c. China.

Recommended Films:

Pakistan: Mound of the Dead (Centron Educational Films, 1972)
China: The Beginnings (Indiana University, 1977)
Hinduism (McGraw-Hill, 1962)
Buddhism (")

FIRST HOUR EXAMINATION

VI. *Christianity and Roma.*

a. The rise of Christianity.
b. The Decline of Western Rome.
c. Unity in Chaos.

VII. *Byzantium and Islam.*

a. Byzantine society and culture.
b. The Orthodox Church.
c. Islam.
d. Islamic culture.

Recommended Films:

Mohammed, Messenger of God (Audio-Brandon)
Islam, The Prophet and the People (Texture Films, 1975)

VIII. *India, China and Japan.*

a. The Gupta Empire.
b. The T'ang and the Sung.
c. The evolution of Japan.

Recommended Films:

China: The Age of Maturity (Indiana University, 1977)
The Seven Samurai (Audio-Brendon)

SECOND HOUR EXAMINATION

IX. *The Medieval Age.*

a. Feudalism.
b. Church vs. State.
c. The Crusades.
d. The rise of the middle class.

e. The birth of the university.
f. The intellectual synthesis.

Recommended Films:

Medieval Knights (Encyclopaedia Britannica, 1956)
Crusades (Teaching Film Custodians, 1948)
Great Thaw (Civ. Series, no. 2. Life-Time, 1970)
Marco Polo (Audio-Brandon)
The Fall of Constantinople (Life-Time Films)

FINAL EXAMINATION

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